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A TENTATIVE DRAFT OF A COOPERATIVE RESEARCH PROJECT
FOR USE IN REGIONAL AGRICULTURAL PLANNING.

In the development of the adjustment programs from 1933 to 1935 the Agricultural Adjustment Administration was faced with an emergency situation. The drive to get results for agriculture as a whole meant that the effect of the programs on individual farm operations could not be given the careful consideration it deserved. The adjustments, as a matter of convenience, were based on past production and the farmers were asked to make a flat percentage cut from this historic base. The primary problem was to obtain an immediate reduction in the burdensome supplies which were keeping prices down. Now that the emphasis is shifted from a strictly emergency problem to the problem of obtaining a balanced adjustment, more attention must be given to the physical and farm management problems of each region, area, and farm. To this end the Agricultural Adjustment Administration is seeking the active cooperation of the various Experiment Stations in the development of regional agricultural adjustment programs. As a first step in this cooperation a general project of the type herein outlined is proposed.

I. OBJECTIVES

The broad general objective of such a cooperative research project is to provide a sound basis for coordinating acreage and production adjustments needed from a national or price point of view with

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adjustments needed from a soil conservation and efficient operation point of view in each agricultural region and area, while, at the same time, permitting the individual farmer as much freedom as possible in adopting the crop and livestock system best adapted to his conditions and farm.

The specific objectives are:

- (1) To differentiate in considerable detail the agriculture of each region into areas or sub-areas with respect to soil conditions, erosion problems, crop and livestock systems, and farm practices,
- (2) To determine the adjustments needed in each area or sub-area in order to maintain fertility or carrying capacity of range and pastures, control erosion, and which will result in efficient use of labor, equipment and other resources,
- (3) To combine the differentiated agricultural areas with common physical and farm or range management problems into agricultural areas (a) where only minor adjustments are needed, (b) where major adjustments are needed, (c) where land should be permanently retired from farming or the type of farming radically changed.

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- (4) To aggregate or total the adjustments needed for each sub-area, area, and for the region as a whole (expressed in terms of percentage increases or decreases in acreage, numbers and production from some stated period),
- (5) To match the adjustments needed to conserve fertility and to promote efficient operation with the adjustments needed for the nation as a whole, in order to obtain a desired level of agricultural prices and income.

II. ORGANIZATION

Research work of the type herein proposed should be on a regional basis involving the close cooperation of the Experiment Stations of the several states in the region, the office of Experiment Stations of the Department, the Division of Farm Management and Costs of the Bureau of Agricultural Economics and the Program Planning Division of the Agricultural Adjustment Administration. For purposes of organizing the project and of coordinating the work of the different states, it is suggested that a regional committee be set up, consisting of representatives from each of the State Experiment Stations involved. The office of Experiment Stations and other Federal agencies should maintain close contact with this committee in order that the work between the several regions be coordinated. Within each state, where the bulk of the

detailed work will be done, it is also proposed that a committee or group of workers consisting of representatives of the Soils, Crops, Livestock, Agricultural Engineering, and Agricultural Economics Departments be appointed to work on the project under the active leadership of the Director of the Experiment Station or some other individual whom he may designate.

III. PROCEDURE

1. Differentiate agricultural areas and sub-areas in which the physical conditions, systems of farming, and farming practices are similar. This differentiation will involve:

- (a) Preparation of a soils type map for each region -
(Prepared chiefly from material already available.
Types to be classified in groups not to exceed 20
and fewer if feasible.)
- (b) Preparation of a soil erosion map - (Prepared chiefly
from material already available including the de-
tailed map of the Soil Erosion Service.)
- (c) Preparation of a range and pasture map showing the
distribution of the several kinds of range or pasture
and average carrying capacity of each type.
- (d) Revision of the Census type-of-farming map. (Revi-
sions to be based on state studies already made and
upon general knowledge of agricultural workers

familiar with local conditions and variations in types of farming.)

- (e) Combination of the soils, erosion, pasture, and type-of-farming maps or studies into a single coordinated map of agricultural areas and sub-areas in which the systems of farming and soil or range management problems are similar. That is, the type-of-farming areas will be further subdivided in those cases where the soils and the soil or range management problems within the area are essentially different.

2. Determine needed adjustments in crop and livestock systems within each area or sub-area from the viewpoint of good soil or range management and efficient farm practice. This should be the most important part of the project, and will involve:

- (a) A short study of the general history of land utilization and crop and livestock production in each area and sub-area during the last 25 years - (To include determination of trend in percentage of crop area in intertilled crops, small grain crops, hay and pasture. Also trend of livestock numbers and production by classes. To be obtained from Census, and other available data or qualitative information.)

- (b) The determination of needed changes in cropping and livestock systems and land utilization in each area and sub-area in view of the maintenance or improvement of soil fertility, carrying capacity, past trend in land utilization, and desirable changes in farm operation. Such a procedure will require the coordination and utilization of all of the available information of the soils, crops, animal husbandry, agricultural engineering, and farm management specialists.
- (c) The calculation of the changes in the acreage and production of the specific crops and numbers and production of the specific classes of livestock which will result from the agreed-upon adjustments. This will have to be done in relation to some selected base period.

3. Combine the differentiated agricultural areas into a small number of groups with similar soil and farm or range management problems. This should result in a segregation of:

- (a) Areas where only minor adjustments are needed. This group will consist of those areas where the soil is relatively fertile or where the range is not overgrazed, where erosion is not an acute problem and can easily be controlled and where the majority of



farmers have already worked out a stable system of farming or ranching which should be continued.

- (b) Areas where major adjustments are needed. This group will consist of areas of an intermediate character that should be continued in farming or present type of livestock production, but in which soil erosion or over grazing is a major problem and where considerable changes in systems of farming or ranching are needed.

- (c) Areas where land should be permanently retired from production or the type of farming radically changed. This group of areas will be coincident with the "Problem Areas" with which the Federal Land Policy Section is primarily concerned and as such will be subject to a more intensive study, such as is contemplated by that unit.

4. Finally, aggregate or total the changes in the acreage and production of specific crops, number and production of specific classes of livestock resulting from the suggested adjustments obtained under 2(c) above by the three groups of areas. This grouping of similar areas and summary of the adjustments needed in each group will complete the first phase of the study and supply a much needed factual background for fitting national adjustments to local conditions.

IV. The second phase of the project will require direct co-operation with the Agricultural Adjustment Administration in the actual planning of production programs. This will involve:

1. Taking the total adjustments required for the nation as a whole as tentatively determined by the Agricultural Adjustment Administration and matching them with the adjustments needed to conserve soil fertility and to promote efficient farming practice, with the view of arriving at the final total adjustment desired for the region.

2. Devising methods and procedure for making the program sufficiently flexible so that it may be adapted to the range in conditions found on the individual farms within each of several groups of areas, while at the same time obtaining the desired production for these areas as well as for the nation as a whole. This will include procedure to be followed in making allotments to individual farms, amount and method of payment, checking compliance, use of acreage adjusted out of intensive crops and questions of like character.

V. RELATION OF PROJECT TO A CONTINUING RESEARCH PROGRAM

This project is intended to be of a reconnaissance nature so as to get some much needed factual background for planning agricultural programs in the immediate future. It also should serve to indicate those types of additional research which are most needed, and those areas where further information should be obtained in order to give a well-rounded picture of the adjustments needed.

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